

#2

OIPE

## RAW SEQUENCE LISTING

DATE: 11/07/2001

PATENT APPLICATION: US/09/965,101

TIME: 14:26:24

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\11072001\I965101.raw

4 <110> APPLICANT: Davis, Heather L.  
5 Krieg, Arthur M.  
6 Schorr, Joachim  
7 Wu, Tong  
9 <120> TITLE OF INVENTION: Vectors and Methods for Immunization or  
10 Therapeutic Protocols  
13 <130> FILE REFERENCE: C1039/7057 (HCL/MAT)  
C--> 15 <140> CURRENT APPLICATION NUMBER: US/09/965,101 *ok*  
C--> 16 <141> CURRENT FILING DATE: 2001-09-26  
18 <150> PRIOR APPLICATION NUMBER: US 09/082,649  
19 <151> PRIOR FILING DATE: 1998-05-20  
21 <150> PRIOR APPLICATION NUMBER: US 60/047,233  
22 <151> PRIOR FILING DATE: 1997-05-20  
24 <150> PRIOR APPLICATION NUMBER: US 60/047,209  
25 <151> PRIOR FILING DATE: 1997-05-20  
27 <160> NUMBER OF SEQ ID NOS: 84  
29 <170> SOFTWARE: FastSEQ for Windows Version 3.0  
31 <210> SEQ ID NO: 1  
32 <211> LENGTH: 20  
33 <212> TYPE: DNA  
34 <213> ORGANISM: Artificial Sequence  
36 <220> FEATURE:  
37 <223> OTHER INFORMATION: synthetic oligonucleotide *ok*  
39 <400> SEQUENCE: 1  
40 tccatgtcgt tcctgtcgtt  
42 <210> SEQ ID NO: 2  
43 <211> LENGTH: 19  
44 <212> TYPE: DNA  
45 <213> ORGANISM: Artificial Sequence  
47 <220> FEATURE:  
48 <223> OTHER INFORMATION: synthetic oligonucleotide *ok*  
50 <400> SEQUENCE: 2  
51 tcctgacgtt cctgacgtt  
53 <210> SEQ ID NO: 3  
54 <211> LENGTH: 24  
55 <212> TYPE: DNA  
56 <213> ORGANISM: Artificial Sequence  
58 <220> FEATURE:  
59 <223> OTHER INFORMATION: synthetic oligonucleotide *ok*  
61 <221> NAME/KEY: misc\_feature  
62 <222> LOCATION: (0)...(0)  
63 <223> OTHER INFORMATION: Has a phosphorothioate backbone.  
65 <400> SEQUENCE: 3  
66 tcgtcgtttt gtcgttttgt cggt  
68 <210> SEQ ID NO: 4  
69 <211> LENGTH: 30  
70 <212> TYPE: DNA

ENTERED

ENTERED

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71 <213> ORGANISM: Artificial Sequence
73 <220> FEATURE:
74 <223> OTHER INFORMATION: synthetic oligonucleotide OK
76 <400> SEQUENCE: 4
77 ccgtggatat ccgatgtacg ggccagatat 30
79 <210> SEQ ID NO: 5
80 <211> LENGTH: 32
81 <212> TYPE: DNA
82 <213> ORGANISM: Artificial Sequence
84 <220> FEATURE:
85 <223> OTHER INFORMATION: synthetic oligonucleotide OK
87 <400> SEQUENCE: 5
88 agtcgcggcc gcaatttcga taagccagta ag 32
90 <210> SEQ ID NO: 6
91 <211> LENGTH: 35
92 <212> TYPE: DNA
93 <213> ORGANISM: Artificial Sequence
95 <220> FEATURE:
96 <223> OTHER INFORMATION: synthetic oligonucleotide OK
98 <400> SEQUENCE: 6
99 attctcgagt ctagactaga gctcgctgat cagcc 35
101 <210> SEQ ID NO: 7
102 <211> LENGTH: 29
103 <212> TYPE: DNA
104 <213> ORGANISM: Artificial Sequence
106 <220> FEATURE:
107 <223> OTHER INFORMATION: synthetic oligonucleotide OK
109 <400> SEQUENCE: 7
110 attaggcctt ccccagcatg cctgctatt 29
112 <210> SEQ ID NO: 8
113 <211> LENGTH: 37
114 <212> TYPE: DNA
115 <213> ORGANISM: Artificial Sequence
117 <220> FEATURE:
118 <223> OTHER INFORMATION: synthetic oligonucleotide OK
120 <400> SEQUENCE: 8
121 tataggccct attttaaacg cgccctgtag cggcgca 37
123 <210> SEQ ID NO: 9
124 <211> LENGTH: 38
125 <212> TYPE: DNA
126 <213> ORGANISM: Artificial Sequence
128 <220> FEATURE:
129 <223> OTHER INFORMATION: synthetic oligonucleotide OK
131 <400> SEQUENCE: 9
132 ctatggcgcc ttgggcccaa ttttggttaa atcagctc 38
134 <210> SEQ ID NO: 10
135 <211> LENGTH: 28
136 <212> TYPE: DNA
137 <213> ORGANISM: Artificial Sequence

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139 <220> FEATURE:  
 140 <223> OTHER INFORMATION: synthetic oligonucleotide *ok*  
 142 <400> SEQUENCE: 10  
 143 aaattcgaaa gtactggacc tgtaaca 28  
 145 <210> SEQ ID NO: 11  
 146 <211> LENGTH: 30  
 147 <212> TYPE: DNA  
 148 <213> ORGANISM: Artificial Sequence *ok*  
 150 <220> FEATURE:  
 151 <223> OTHER INFORMATION: synthetic oligonucleotide  
 153 <400> SEQUENCE: 11  
 154 cgtgttaaca ggtccagtac tttcgaattt 30  
 156 <210> SEQ ID NO: 12  
 157 <211> LENGTH: 44  
 158 <212> TYPE: DNA  
 159 <213> ORGANISM: Artificial Sequence  
 161 <220> FEATURE: ✓  
 162 <223> OTHER INFORMATION: synthetic oligonucleotide  
 164 <400> SEQUENCE: 12  
 165 gactccatga cgctcctgac gtttccatga cgctcctgac gttg 44  
 167 <210> SEQ ID NO: 13  
 168 <211> LENGTH: 44  
 169 <212> TYPE: DNA  
 170 <213> ORGANISM: Artificial Sequence  
 172 <220> FEATURE: ✓  
 173 <223> OTHER INFORMATION: synthetic oligonucleotide  
 175 <400> SEQUENCE: 13  
 176 gtccaacgctc aggaacgtca tggaaacgctc aggaacgtca tgga 44  
 178 <210> SEQ ID NO: 14  
 179 <211> LENGTH: 54  
 180 <212> TYPE: DNA  
 181 <213> ORGANISM: Artificial Sequence  
 183 <220> FEATURE: ✓  
 184 <223> OTHER INFORMATION: synthetic oligonucleotide  
 186 <400> SEQUENCE: 14  
 187 gacttcgtgt cgcttcttctg tcgtcttttag cgcttctcct gcgtgcgtcc cttg 54  
 189 <210> SEQ ID NO: 15  
 190 <211> LENGTH: 52  
 191 <212> TYPE: DNA  
 192 <213> ORGANISM: Artificial Sequence  
 194 <220> FEATURE:  
 195 <223> OTHER INFORMATION: synthetic oligonucleotide  
 197 <400> SEQUENCE: 15  
 198 gactcgtcgt tttgctgttt tgctgctttcg tcgttttctg gttttgctgt tg 52  
 200 <210> SEQ ID NO: 16  
 201 <211> LENGTH: 29  
 202 <212> TYPE: DNA  
 203 <213> ORGANISM: Artificial Sequence  
 205 <220> FEATURE:

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206 <223> OTHER INFORMATION: synthetic oligonucleotide ✓  
 208 <400> SEQUENCE: 16  
 209 gccctagtagtggttaacttt aaagggccc 29  
 211 <210> SEQ ID NO: 17  
 212 <211> LENGTH: 29  
 213 <212> TYPE: DNA  
 214 <213> ORGANISM: Artificial Sequence ✓  
 216 <220> FEATURE:  
 217 <223> OTHER INFORMATION: synthetic oligonucleotide  
 219 <400> SEQUENCE: 17  
 220 ggcggggccct ttaaagttaa cagtactag 29  
 222 <210> SEQ ID NO: 18  
 223 <211> LENGTH: 48  
 224 <212> TYPE: DNA  
 225 <213> ORGANISM: Artificial Sequence  
 227 <220> FEATURE:  
 228 <223> OTHER INFORMATION: synthetic oligonucleotide ✓  
 230 <400> SEQUENCE: 18  
 231 gccctggcgg ggataaggcg gggatttggc gggggataag gcggggaa 48  
 233 <210> SEQ ID NO: 19  
 234 <211> LENGTH: 45  
 235 <212> TYPE: DNA  
 236 <213> ORGANISM: Artificial Sequence  
 238 <220> FEATURE:  
 239 <223> OTHER INFORMATION: synthetic oligonucleotide ✓  
 241 <400> SEQUENCE: 19  
 242 ggcccccgcc ttatccccgc caaatccccg cttatcccc gccag 45  
 244 <210> SEQ ID NO: 20  
 245 <211> LENGTH: 38  
 246 <212> TYPE: DNA  
 247 <213> ORGANISM: Artificial Sequence  
 249 <220> FEATURE:  
 250 <223> OTHER INFORMATION: synthetic oligonucleotide ✓  
 252 <400> SEQUENCE: 20  
 253 gccctatttt aaattcgaaa gtactggacc tgtaaca 38  
 255 <210> SEQ ID NO: 21  
 256 <211> LENGTH: 37  
 257 <212> TYPE: DNA  
 258 <213> ORGANISM: Artificial Sequence ✓  
 260 <220> FEATURE:  
 261 <223> OTHER INFORMATION: synthetic oligonucleotide ✓  
 263 <400> SEQUENCE: 21  
 264 cgtgttaaca ggtccagtag tttcgaattt aaaatag 37  
 266 <210> SEQ ID NO: 22  
 267 <211> LENGTH: 20  
 268 <212> TYPE: DNA  
 269 <213> ORGANISM: Artificial Sequence ✓  
 271 <220> FEATURE:  
 272 <223> OTHER INFORMATION: synthetic oligonucleotide ✓

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274 <400> SEQUENCE: 22
275   cgcgcgcgcgcg cgcgcgcgcgcg                               20
277 <210> SEQ ID NO: 23
278 <211> LENGTH: 29
279 <212> TYPE: DNA
280 <213> ORGANISM: Artificial Sequence
282 <220> FEATURE:
283 <223> OTHER INFORMATION: synthetic oligonucleotide
285 <400> SEQUENCE: 23
286   gtctctagac agccactggt aacaggatt                             29
288 <210> SEQ ID NO: 24
289 <211> LENGTH: 29
290 <212> TYPE: DNA
291 <213> ORGANISM: Artificial Sequence
293 <220> FEATURE:
294 <223> OTHER INFORMATION: synthetic oligonucleotide
296 <400> SEQUENCE: 24
297   gtcgttggtgt cgtcaagtca gcgtaatgc                           29
299 <210> SEQ ID NO: 25
300 <211> LENGTH: 20
301 <212> TYPE: DNA
302 <213> ORGANISM: Artificial Sequence
304 <220> FEATURE:
305 <223> OTHER INFORMATION: synthetic oligonucleotide
307 <400> SEQUENCE: 25
308   tcgttttctgt aatgaaggag                                     20
310 <210> SEQ ID NO: 26
311 <211> LENGTH: 20
312 <212> TYPE: DNA
313 <213> ORGANISM: Artificial Sequence
315 <220> FEATURE:
316 <223> OTHER INFORMATION: synthetic oligonucleotide
318 <400> SEQUENCE: 26
319   aaggcagttc cataggatgg                                       20
321 <210> SEQ ID NO: 27
322 <211> LENGTH: 35
323 <212> TYPE: DNA
324 <213> ORGANISM: Artificial Sequence
326 <220> FEATURE:
327 <223> OTHER INFORMATION: synthetic oligonucleotide
329 <400> SEQUENCE: 27
330   tcgatctgcg attccaactc gtccaacatc aatac                     35
332 <210> SEQ ID NO: 28
333 <211> LENGTH: 20
334 <212> TYPE: DNA
335 <213> ORGANISM: Artificial Sequence
337 <220> FEATURE:
338 <223> OTHER INFORMATION: synthetic oligonucleotide
340 <400> SEQUENCE: 28

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/965,101

DATE: 11/07/2001

TIME: 14:26:25

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\11072001\I965101.raw

L:15 M:270 C: Current Application Number differs, Replaced Current Application Number

L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date